

Observations of Comet *a*, 1888 (*Sawerthal*), made at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The observations were made with the East or Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to each other, and each inclined 45° to the parallel of declination.

Comet *a*, 1888 (*Sawerthal*).

Greenwich Mean Solar Time.	Observer.	♂-★ R.A.		Corr. for Par. and Refraction in R.A.	♂-★ N.P.D.	Corr. for Par. and Refraction in N.P.D.		No. of Comp.	Apparent R.A.			Apparent N.P.D.		Comp. Star.
		m	s	s		"	"		h	m	s	°	'	
1888 April 6 16 15 6	H. T.	+0	55·95	-0·30	- 6 14·5	- 6·4	6	6	22	18	27·45	81	0 7·5	<i>a</i>
6 16 19 41	"	-0	38·73	-0·20	+14 35·4	-3·9	4	4	22	18	29·78	81	0 10·5	<i>b</i>

Mean Places of Comparison Stars.

Star's Name.	R.A., 1888 <sup>o</sup> .			N.P.D., 1888 <sup>o</sup> .			Authority.
	h	m	s	°	'	"	
<i>a</i> Lalande 43672	22	17	32·74	81	6	20·4	Second Armagh Catalogue.
<i>b</i> W. B. XXII. 368	22	19	9·63	80	45	30·9	Glasgow Catalogue.

The observations are corrected for parallax and refraction.  
The initials H. T. are those of Mr. Turner.  
The comet has been looked for on a number of other mornings, but bad weather has prevented its being seen.

*The New Southern Comet. Observations made at Graham's Town, Cape of Good Hope. By L. A. Eddie.*

1888, *February* 25.—I obtained this morning a good view of the comet now visible in our south-eastern heavens, situated in the constellation *Telescopium*. It has a very condensed nucleus, equal in magnitude to a 4th magnitude star. The tail could be traced to  $\tau$  *Telescopii*,  $8^\circ$  from the nucleus, and it possessed some considerable lustre to a point about  $3^\circ$  from the head, where it was fully 30' in breadth. A decided curvature could be observed with the concavity towards the south. When viewed through the  $9\frac{1}{2}$ -inch Calver it appeared a magnificent object of a deep golden colour, with highly condensed nucleus possessing a nucleolus, or tiny point of brilliant light in the centre. The nucleus was more sharply defined on its posterior border, but no dark interval was traceable. There was but little coma preceding the nucleus, but that around and behind was remarkably brilliant, and was very markedly curved on the southern border immediately surrounding the nucleus. The southern border of the tail was more sharply defined though more rugged in its outline. It was rendered invisible to the naked eye by the daylight at 5 o'clock; the Sun rose at 5.49.

When viewed in the reflector as the day advanced it assumed a variety of interesting forms.

At one time it appeared as a barbed spear, the barbed head resembling two wings; then these faded away and it resembled a ball of fire on the end of a luminous stick; lastly a fluffy ball of pale light alone remained, all vestige of tail and surrounding coma having faded away.

*February* 28.—The comet was scarcely visible to the naked eye owing to the brightness of the full Moon at 3<sup>h</sup> 30<sup>m</sup> A.M.

It did not appear to have increased in brilliancy. The only change I could detect was a widening of the coma in advance of the nucleus, and a slight trace of dark intervals therein dividing it into cometic envelopes, as in Coggia's Comet of 1874.

*March* 4.—After a number of cloudy mornings comet again visible in a clear sky. Notwithstanding the brightness of the moonlight it formed a conspicuous object with a tail  $3^\circ$  in length to the unaided vision. On comparing it with the neighbouring objects I concluded that it had slightly increased in brilliancy, and was equal to a star of  $3\frac{1}{2}$  mag. When viewed in the reflector the tail appeared ruddy, and the nucleus a greenish yellow. The latter was very brilliant, and surrounded by a coma which seemed to proceed in a double jet of faintly luminous matter from the centre of the nucleus to a short distance in front of it, and was then bent back to the right and left into the tail, the interval between these jets being filled with cometic matter of still fainter luminosity. The tail immediately